

**COMPOSITIONS AND METHODS FOR SEPARATING AMINES AND AMINO ACIDS  
FROM THEIR COUNTER-ENANTIOMERS**

5 ABSTRACT OF THE DISCLOSURE

Diketo- and pyridine-containing chiral crown ligands having at least two chiral bulky groups attached to two different chiral carbon atoms of the crown that are covalently bonded to or coated on suitable solid supports, and further coated by hydrophobic organic solvents are disclosed. These compositions and associated  
10 methods are characterized by selectivity of several target amine or amino acid enantiomers over their counter-enantiomers and derivatives. The composition preferably has an  $\alpha$ -value greater than or equal to 4. This allows for the separation of such enantiomers with non-chromatographic resin bed separations of three separation  
15 stages or less.